



(Knowledge for Development)

KIBABII UNIVERSITY

(KIBU)

**UNIVERSITY EXAMINATIONS
2022/2023 ACADEMIC YEAR**

**END OF SEMESTER EXAMINATION
YEAR TWO SEMESTER TWO EXAMINATIONS
FOR THE DEGREE OF BACHELORS OF SCIENCE
(INFORMATION TECHNOLOGY)**

COURSE CODE : BIT 222/BIT 328

COURSE TITLE : WEB TECHNOLOGIES I

DATE: 21/04/2023

TIME: 09.00A.M.-11.00A.M.

2HRS

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTIONS ONE AND ANY OTHER TWO.

QUESTION ONE (COMPULSORY) [30 MARKS]

1. The correct sequence of HTML tags for starting a webpage is -
A. Head, Title, HTML, body B. HTML, Body, Title, Head
C. TML, Head, Title, Body D. HTML, Head, Title, Body
2. How to create an unordered list (a list with the list items in bullets) in HTML?
A. B. C. D. <i>
3. How to create an ordered list (a list with the list items in numbers) in HTML?
A. ul> B. C. D. <i>
4. How to create a checkbox in HTML?
A. <input type = "checkbox"> B. <input type = "button">
C. <checkbox> D. <input type = "check">
5. Which of the following tag is used to add rows in the table?
A. <td> and </td> B. <th> and </th> C. <tr> and </tr> D. None of the above
6. Which of the following attribute is used to provide a unique name to an element?
A. class B. id C. type E. None of the above
7. How to insert a background image in HTML?
A. <body background = "img.png"> B.
C. bg-image = "img.png"> D. None of the above
8. Which of the following HTML attribute is used to define inline styles?
A. style B. type C. class D. None of the above
9. The tags in HTML are -
A. case-sensitive B. in upper case C. not case sensitive D. in lowercase
10. In HTML5, which of the following tag is used to initialize the document type?
A. <Doctype HTML> B. <Doctype html> C. <Doctype> D. <!DOCTYPE html>
11. The property in CSS used to change the background color of an element is -
A. bgcolor B. color C. background-color D. All of the above
12. The CSS property used to control the element's font-size is -
A. text-style B. text-size C. font-size D. None of the above
13. The HTML attribute used to define the internal stylesheet is -
A. <style> B. style C. <link> D. <script>
14. Which of the following is the correct syntax to make the background-color of all paragraph elements to yellow?
A. p {background-color : yellow;} B. p {background-color : #yellow;}
C. all {background-color : yellow;} D. all p {background-color : #yellow;}
15. Which of the following property is used as the shorthand property for the padding properties?
A. padding-left B. padding-right C. padding D. All of the above
16. subscript of text using CSS?
A. vertical-align: sub B. vertical-align: super
C. vertical-align: subscript D. None of the above

17. Which of the following syntax is correct in CSS to make each word of a sentence start with a capital letter?
 A. text-style : capital; B. transform : capitalize;
 C. text-transform : capital; D. text-transform : capitalize;
18. Which of the following is the correct syntax to select all paragraph elements in a div element?
 A. div p B. p C. div#p D. div ~ p
19. Which of the following CSS property is used to specify whether the table cells share the common or separate border?
 A. border-collapse B. border-radius C. border-spacing D. None of the above
20. Which of the following CSS property is used to set the horizontal alignment of a table-cell box or the block element?
 A. text-align property B. text-transform property
 C. text-shadow property D. text-decoration
21. JavaScript is the programming language of the _____.
 A. Desktop B. Mobile C. Web D. Server
22. Which of the following statement(s) is true about the JavaScript?
 A. It is a scripting language used to make the website interactive
 B. It is an advanced version of Java for Desktop and Mobile application development
 C. It is a markup language of Java to develop the webpages
 D. All of the above
23. JavaScript code can be written in _____.
 A. JavaScript file (.js file) B. HTML document directly
 C. JavaScript file and in HTML document directly D. In style sheets (.css file)
24. Which JavaScript method is used to access an HTML element by id?
 A. getElementById() B. getElement(id) C. getElementById(id) D. elementById(id)
25. Which JavaScript method is used to write HTML output?
 A. document.write() B. document.output() C. console.log() D. document.writeHTML()
26. Which JavaScript method is used to write into an alert box?
 A. window.alertHTML() B. window.alert() C. window.alertBox() D. window.alertContent()
27. Which is the correct JavaScript statement to print the addition of two numbers 10 and 20 in a paragraph whose id is 'result'?
 A. getElementById("result").innerHTML = 10+20;
 B. getElementById("result").innerHTML = "10+20";
 C. getElementById("#result").innerHTML = 10+20;
 D. All of the above
28. Which JavaScript keyword is used to declare a variable?
 A. Var B. var C. Let D. All of the above
29. What is the main difference between var and let keywords in JavaScript?
 A. var defines a variable while let defines a constant
 B. var defined function scoped variable while let define block scoped variable

- C. The value of a variable declared with var can be changed while the value of a variable declared with let cannot be changed
- D. All of the above
30. Web 2.0 can best be described as a(n)?
- A. Software package developed by Microsoft and available at a discount to teachers.
- B. Variation of the internet created by Al Gore in 1996.
- C. Approach to the internet in which users share thoughts, strategies, opinions and ideas in a free and open forum such as blogs, wikis and podcasts.
- D. Faster internet for big business.

QUESTION TWO [20 MARKS]

- a. Write an HTML code to form a table to show the below values in a tabular form with heading as Adm. No., Student name, Subject Name, and values as: **[10 marks]**
- Sam, Physics
- Nic, Math
- Paul, Chemistry
- b. Explain any five new features which were not present in HTML but are added to HTML5. **[10 marks]**

QUESTION THREE [20 MARKS]

- a. Write CSS code to set the text color to red, for all <p> elements. **[3 marks]**
- b. Write CSS code to set the text color to red, for the element with id="para1" in the HTML snippet below. **[3 marks]**

```
<body>
  <h1>This is a heading</h1>
  <p id="para1">This is a paragraph</p>
</body>
```

- c. Write CSS code to set the text color to red, for elements with class="colortext" in the HTML snippet below. **[3 marks]**

```
<body>
  <h1>This is a heading</h1>
  <p>This is a paragraph</p>
  <p class="colortext">This is a paragraph</p>
  <p class="colortext">This is a paragraph</p>
</body>
```

- d. Write CSS code to set the page's background color to red in the HTML snippet below.

[3 marks]

```
<body>
  <h1>This is a heading</h1>
  <p>This is a paragraph</p>
  <p>This is a paragraph</p>
</body>
```

- e. Explain the elements of the CSS Box Model. [2 marks]
- f. Explain three ways in which you can CSS be integrated into an HTML page. [6 marks]

QUESTION FOUR [20 MARKS]

- a. Distinguish between undeclared and undefined variables as used in JavaScript. [4 marks]
- b. Using examples show three ways to declare a JavaScript variable. [6 marks]
- c. Write JavaScript code to create an array of fruits with Banana, Orange, Apple, and Mango as its elements. [4 marks]
- d. Write a code to add a "Lemon" to the above array. [2 marks]
- e. Write a code to display the length of the fruit array above. [1 marks]
- f. Write JavaScript code to create a person object with firstName, lastName age and sex as the properties. [3 marks]

QUESTION FIVE [20 MARKS]

- a. Give the difference between the web and the internet. [4marks]
- b. Define the following terminologies [3 marks]
- Webpage
 - Website
 - Browser
- c. Distinguish between static and dynamic web. [4 marks]
- d. Explain the evolution of the web from Web 1.0 to web 3.0. [9 marks]